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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,963	08/26/2005	Peter H Seeberger	MTV-055.01	4931
25181	7590	11/28/2008		
FOLEY HOAG, LLP PATENT GROUP, WORLD TRADE CENTER WEST 155 SEAPORT BLVD BOSTON, MA 02110			EXAMINER HENRY, MICHAEL C	
			ART UNIT	PAPER NUMBER
			1623	
			MAIL DATE	DELIVERY MODE
			11/28/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/520,963

**Applicant(s)**

SEEBERGER ET AL.

**Examiner**

MICHAEL C. HENRY

**Art Unit**

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-11 and 13-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 13-37 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 3-5, 7 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The following office action is a responsive to the Amendment filed, 06/20/08 and the supplemental amendment filed 08/20/08. The amendment filed 06/20/08 and the supplemental amendment filed 08/20/08 affect the application, 10/520,963 as follows:

1. Claims 1, 8, 9, 10, 11, 19 have been amended. New claims 31-37 are added.

Applicant's amendments have overcome the claims objections and rejections made under 35 U.S.C. 102(b) by applying Martin-Lomas et al. reference .....

Consequently, the said claims objections and rejections are withdrawn. However, the rejections of claims 1, 6, 8, and 9 made under 35 U.S.C. 102(b) by applying Jaworek et al. reference are maintained.

2. The responsive to applicants' amendments is contained herein below.

Claims 1, 3-11, 13-37 are pending in application.

#### ***Claim Objections***

Claim 10 is objected to because of the following informalities: The claim recites a "compound selected from the group consisting of". However, the structure of the compound listed last in said group does not have a net charge of zero which is required. This appears to be a typographical error. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

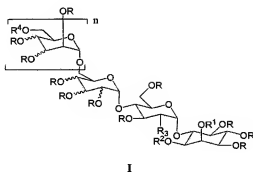
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 8, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaworek et al. (Carbohydrates Research 331 (2001) 375-391).

In claim 1, applicant claims a compound represented by formula I:



wherein,

n is 1, 3, or 4;

R represents independently for each occurrence H, alkyl, aryl,  $-\text{CH}_2\text{-aryl}$ ,  $-\text{C(O)-alkyl}$ ,  $-\text{C(O)-aryl}$ , or  $-\text{Si(alkyl)}_3$ ;

$\text{R}^1$  and  $\text{R}^2$  are independently H,  $-\text{CH}_2\text{-aryl}$ ,  $-\text{C(O)-alkyl}$ ,  $-\text{C(O)-aryl}$ ,  $-\text{Si(alkyl)}_3$ ; or  $\text{R}^1$  and  $\text{R}^2$  taken together are  $\text{C(CH}_3)_2$ ,  $\text{P(O)OH}$ , or  $\text{P(O)OR}^5$ ;

$\text{R}^3$  is amino,  $-\text{N}_3$ , or  $-\text{NH}_3\text{X}$ ;

$\text{R}^4$  represents independently for each occurrence alkyl, aryl,  $-\text{CH}_2\text{-aryl}$ ,  $-\text{C(O)-alkyl}$ ,  $-\text{C(O)-aryl}$ ,  $-\text{Si(alkyl)}_3$ , or  $-\text{P(O)(OR}^5)_2$ ;

$\text{R}^5$  represents independently for each occurrence H,  $\text{Li}^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Rb}^+$ ,  $\text{Cs}^+$ , aryl, or an optionally substituted alkyl group; and

X is a halogen, alkyl carboxylate, or aryl carboxylate.

Jaworek et al. disclose applicant's compound of formula I wherein  $n = 1$ ;  $R = -CH_2\text{-aryl}$   $= -CH_2\text{-phenyl} = Bn$  wherein  $Bn = \text{benzyl}$ ;  $R^1 = R^2 = H$ ;  $R^3 = N_3$ ;  $R^4 = -CH_2\text{-aryl}$  (i.e.,  $-CH_2\text{-phenyl}$  or  $\text{benzyl}$ ) (see compound 30b, page 380).

Claim 6 which is drawn to the compound of claim 1, wherein  $R^3 = N_3$ , is anticipated by Jaworek et al. (see compound 30b, page 380). It should be noted that in Jaworek et al.'s compound 30b,  $n = 1$ ;  $R = -CH_2\text{-aryl} = -CH_2\text{-phenyl} = Bn$  wherein  $Bn = \text{benzyl}$ ;  $R^1 = R^2 = H$ ;  $R^3 = N_3$ ;  $R^4 = -CH_2\text{-aryl}$  (i.e.,  $-CH_2\text{-phenyl}$  or  $\text{benzyl}$ ) (see compound 30b, page 380). Claims 8 and 9 which are drawn to the compound of claim 1, wherein  $R^4 = -CH_2\text{-phenyl} \dots$ , are also anticipated by Jaworek et al., since  $R^4 = -CH_2\text{-phenyl} = Bn$  wherein  $Bn = \text{benzyl}$ , for Jaworek et al.'s compound (see compound 30b, page 380).

*Allowable subject matter*

Though the compounds of the present invention are similar to the compounds of the prior art, the compounds of claim 11, 13-18, 31-37 possess structural differences to the compounds of prior art documents and these differences are not suggested in the prior art, nor are obvious over the prior art. For example, the compounds of claim 11, 13-18, 31-37 contain different numbers of monosaccharide residues and different types of functional groups or moieties attached to their pyranose rings as compared to the compounds of the prior art. Similarly, Claims 3-5, 7 are objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 10 is objected to but may be allowable provided that the claim objection is overcome. Claims 19-26 are allowable since the prior art does not teach or suggest the method recited in said claims. Also, the prior art does not teach or suggest the method recited in Claims 27-30.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 6, 8, 9 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Henry whose telephone number is 571-272-0652. The examiner can normally be reached on 8.30am-5pm; Mon-Fri. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Henry  
November 21, 2008.

/Shaojia Anna Jiang/  
Supervisory Patent Examiner  
Art Unit 1623